





We Claim:

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A transgenic plant comprising a recombinant polynucleotide comprising a nucleotide sequence encoding a polypeptide comprising at least 6 consecutive amino acids of a sequence selected from the group consisting of SEQ ID Nos. 2N, where N=1-56, wherein the recombinant polynucleotide alters the plant's disease tolerance or resistance when compared with the same trait of another plant lacking the recombinant polynucleotide.

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2. The transgenic plant of claim 1, wherein the nucleotide sequence encodes a polypeptide comprising a conserved domain selected from the group consisting of SEQ ID Nos. 2N, where N=1-56

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3. The transgenic plant of claim 1, wherein the recombinant polynucleotide further comprises a promoter operably linked to said nucleotide sequence.

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4. The transgenic plant of claim 3, wherein said promoter is constitutive or inducible or tissue-active.

5. A method for altering the disease tolerance or resistance of a plant, said method comprising (a) transforming a plant with a recombinant polynucleotide comprising a nucleotide sequence encoding a polypeptide comprising at least 6 consecutive amino acids of a sequence selected from the group consisting of SEQ ID Nos. 2N, where N=1-56, (b) selecting said transformed plants; and (c) identifying a transformed plant having an altered disease tolerance or resistance.

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6. The method of claim 5, wherein the nucleotide sequence encodes a polypeptide comprising a conserved domain selected from the group consisting of SEQ ID Nos. 2N, where N=1-56.

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2. The method of claim 5, wherein the recombinant polynucleotide further comprises a promoter operably linked to said nucleotide sequence.

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. The method of claim 8, wherein said promoter is constitutive or inducible or tissue-active.

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A method for altering the expression levels of at least one gene in a plant, said method comprising (a) transforming the plant with a recombinant polynucleotide comprising a nucleotide sequence encoding a polypeptide comprising at least 6 consecutive amino acids of a sequence selected from the group consisting of SEQ ID Nos. 2N, where N=1-56; and (b) selecting said transformed plant.

The method of claim 10, wherein said recombinant polynucleotide encodes a polypeptide comprising a conserved domain selected from the group consisting of SEQ ID Nos. 2N, where N=1-56.

The method of claim 10, wherein the nucleotide sequence further comprises a promoter operably linked to said nucleotide sequence.

Pl. 126. The method of claim 10, wherein said promoter is constitutive or inducible or tissue-active.

A method for altering the disease tolerance or resistance in a plant, said method comprising (a) transforming the plant with a recombinant polynucleotide comprising at least 18 consecutive nucleotides of a sequence selected from the group consisting of SEQ ID Nos. 2N-1, where N=1-56, and SEQ ID-Nos. 113-121; and (b) selecting said transformed plant.

A method for altering a plant's trait, said method comprising (a) providing a database sequence; (b) comparing said database sequence with a polypeptide selected from SEQ ID Nos. 2N, where N= 1-56; (c) selecting a database sequence that meets selected sequence criteria; and (d) transforming said selected database sequence in the plant.

16. A method for altering a plant's trait, said method comprising (a) providing a database sequence; (b) comparing said database sequence with a polynucleotide selected from SEQ ID Nos. 2N-1, where N= 1-56 or SEQ ID Nos. 113-121; (c) selecting a database sequence that meets selected sequence criteria; and (d) transforming said selected database sequence in the plant.

17. A method for altering a plant's trait, said method comprising (a) providing a test polynucleotide; (b) hybridizing said test polynucleotide with a polynucleotide selected from SEQ ID Nos. 2N-1, where N= 1-56 or SEQ ID Nos. 113-121 at low stringency; and (c) transforming said hybridizing test polynucleotide in a plant to alter a trait of the plant.

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